WHAT IS CLAIMED IS:

1.   A process for determining whether a vehicle gearbox is engaged in at least a first gear ratio or a second gear ratio, the process comprising the steps of:

calculating which of the first and second gear ratios the gearbox is engaged;

repeating the steps of calculating a plurality of times;

summing the results of said calculations; and

selecting between the first and second gear ratios based at least upon the results of the step of summing.

2.   The process of claim 1, wherein the step of calculating includes the step of determining a speed ratio.

3.   The process of claim 2, wherein the speed ratio is a ratio of an input speed to said gearbox and an output speed from said gearbox.

4.   The process of claim 3, wherein the step of summing includes the steps of summing occurrences of first gear ratio determinations and summing occurrences of second gear ratio determinations.

5.   The process of claim 1, wherein the step of selecting between the first and second gear ratios includes determining whether the sum of first gear ratio determinations is greater than the sum of second gear ratio determinations.

6.   The process of claim 5, wherein the step of selecting between the first and second gear ratios includes the step of determining whether the sum of first gear ratio determinations and the sum of second gear ratio determinations exceed a minimum value.

7.   The process of claim 1 wherein the step of calculating includes the step of determining a ratio of a motor speed signal and a rotor speed signal, and further

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wherein the step of selecting between includes the step of rejecting both the first and second gear ratios.

8.   The process of claim 7, further comprising the steps of:

waiting an interval of time after the step of rejecting: and

calculating which of the first and second gear ratios the gearbox is engaged in after the step of waiting.

9.   An apparatus for determining whether a vehicle gearbox is engaged in at least a first gear ratio or a second gear ratio, comprising:

means for calculating which of the first and second gear ratios the gearbox is engaged;

means for repeating the steps of calculating a plurality of times;

means for summing the results of said calculations; and

means for selecting between the first and second gear ratios based at least upon the results of the step of summing.

10.   The apparatus of claim 9, wherein the means for calculating includes a means for determining a speed ratio.

11.   The apparatus of claim 10, wherein the speed ratio is a ratio of an input speed to said gearbox and an output speed from said gearbox.

12.   The apparatus of claim 11, wherein the means for summing includes means for summing occurrences of first gear ratio determinations and means for summing occurrences of second gear ratio determinations.

13.   The apparatus of claim 9, wherein the means for selecting between the first and second gear ratios includes means for determining whether the sum of first gear ratio determinations is greater than the sum of second gear ratio determinations.

14.   The apparatus of claim 13, wherein the means for selecting between the first and second gear ratios includes means for determining whether the sum of first gear ratio determinations and the sum of second gear ratio determinations exceed a minimum value.

15.   The apparatus of claim 9, wherein the means for calculating includes means for determining a ratio of a motor speed signal and a rotor speed signal, and further wherein means for selecting between includes means for rejecting both the first and second gear ratios.

16.   The apparatus of claim 7, further comprising:
means for waiting an interval of time after the step of rejecting: and
means for calculating which of the first and second gear ratios the gearbox is engaged in, after the step of waiting.

17.   An electronic control system for determining whether a vehicle gearbox is engaged in at least a first gear ratio or a second gear ratio, comprising:
(a) a first speed sensor;
(b) a second speed sensor; and
(c) at least one microcontroller configured to
        (i) calculate at least twice which of the first and second gear ratios the gearbox is engaged in,
        (ii) sum the results of said calculations, and
        (iii) select between the first and second gear ratios based at least upon the summed results.

18.   The system of claim 17, wherein the at least one microcontroller is configured to determine a speed ratio.

19.   The system of claim 18, wherein the speed ratio is a ratio of a shaft input speed to said gearbox and a shaft output speed from said gearbox.

20.   The system of claim 19, wherein the at least one microcontroller is configured to sum occurrences of first gear ratio determinations and sum occurrences of second gear ratio determinations.

21.   The system of claim 20, wherein the at least one microcontroller is configured to determine whether the sum of first gear ratio determinations is greater than the sum of second gear ratio determinations.

22.   The system of claim 21, wherein the at least one microcontroller is configured to determine whether the sum of first gear ratio determinations and the sum of second gear ratio determinations exceed a minimum value.

23.   The system of claim 17 wherein the at least one microcontroller is configured to determine a ratio of a motor speed signal and a rotor speed signal, and to reject both the first and second gear ratios.

24.   The system of claim 23, wherein the at least one microcontroller is configured to:
        wait an interval of time after the step of rejecting; and
        calculate in which of the first and second gear ratios the gearbox is engaged after the step of waiting.

25.   The system of claim 17, wherein the gearbox is engageable in at least three gear ratios.

26.   The process of claim 3, wherein the speed ratio is a ratio of an engine speed and rotor speed.